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NEWS 1		Web Page URLs for STN Seminar Schedule - N. America
NEWS 2		"Ask CAS" for self-help around the clock
NEWS 3	May 12	EXTEND option available in structure searching
NEWS 4	May 12	Polymer links for the POLYLINK command completed in REGISTRY
NEWS 5	May 27	New UPM (Update Code Maximum) field for more efficient patent SDIs in CAplus
NEWS 6	May 27	CAplus super roles and document types searchable in REGISTRY
NEWS 7	Jun 28	Additional enzyme-catalyzed reactions added to CASREACT
NEWS 8	Jun 28	ANTE, AQUALINE, BIOENG, CIVILENG, ENVIROENG, MECHENG, and WATER from CSA now available on STN(R)
NEWS 9	Jul 12	BEILSTEIN enhanced with new display and select options, resulting in a closer connection to BABS
NEWS 10	Jul 30	BEILSTEIN on STN workshop to be held August 24 in conjunction with the 228th ACS National Meeting
NEWS 11	AUG 02	IFIPAT/IFIUDB/IFICDB reloaded with new search and display fields
NEWS 12	AUG 02	CAplus and CA patent records enhanced with European and Japan Patent Office Classifications
NEWS 13	AUG 02	STN User Update to be held August 22 in conjunction with the 228th ACS National Meeting
NEWS 14	AUG 02	The Analysis Edition of STN Express with Discover! (Version 7.01 for Windows) now available
NEWS 15	AUG 04	Pricing for the Save Answers for SciFinder Wizard within STN Express with Discover! will change September 1, 2004
NEWS 16	AUG 27	BIOCOMMERCE: Changes and enhancements to content coverage
NEWS 17	AUG 27	BIOTECHABS/BIOTECHDS: Two new display fields added for legal status data from INPADOC
NEWS 18	SEP 01	INPADOC: New family current-awareness alert (SDI) available
NEWS 19	SEP 01	New pricing for the Save Answers for SciFinder Wizard within STN Express with Discover!
NEWS 20	SEP 01	New display format, HITSTR, available in WPIDS/WPINDEX/WPIX

NEWS EXPRESS	JULY 30 CURRENT WINDOWS VERSION IS V7.01, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 11 AUGUST 2004
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FILE 'HOME' ENTERED AT 10:38:56 ON 10 SEP 2004

=> file .meeting
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that are available. If you have requested multiple files, you can
specify a corrected file name or you can enter "IGNORE" to continue
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=> (bacteria or coli or cell)(4A)(immobilized or immobilizing or or coat)
MISSING TERM 'OR OR'
The search profile that was entered contains a logical
operator followed immediately by another operator.

=> (bacteria or coli or cell)(4A)(immobilized or immobilizing or coat)
L1 1187 FILE AGRICOLA
L2 4579 FILE BIOTECHNO
L3 223 FILE CONFSCI
L4 21 FILE HEALSAFE
L5 0 FILE IMSDRUGCONF
L6 4428 FILE LIFESCI
L7 1 FILE MEDICONF
L8 4109 FILE PASCAL

TOTAL FOR ALL FILES
L9 14548 (BACTERIA OR COLI OR CELL)(4A)(IMMOBILIZED OR IMMOBILIZING OR COAT)

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=> l9(P)(mercury or metal or analyte)(P)(detect or measure or determin)
L10           0 FILE AGRICOLA
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'L2(P)(MERCURY'
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'ANALYTE)(P)(DETECT'
L11           5 FILE BIOTECHNO
L12           0 FILE CONFSCI
L13           0 FILE HEALSAFE
L14           0 FILE IMSDRUGCONF
L15           3 FILE LIFESCI
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'L7(P)(MERCURY'
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'ANALYTE)(P)(DETECT'
L16           0 FILE MEDICONF
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'L8(P)(MERCURY'
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'ANALYTE)(P)(DETECT'
L17           5 FILE PASCAL

TOTAL FOR ALL FILES
L18          13 L9(P)(MERCURY OR METAL OR ANALYTE)(P)(DETECT OR MEASURE OR DETER
                MIN)

=> dup rem
ENTER L# LIST OR (END):l18
DUPLICATE IS NOT AVAILABLE IN 'IMSDRUGCONF, MEDICONF'.
ANSWERS FROM THESE FILES WILL BE CONSIDERED UNIQUE
PROCESSING COMPLETED FOR L18
L19           10 DUP REM L18 (3 DUPLICATES REMOVED)

=> d l19 ibib abs total

L19  ANSWER 1 OF 10  LIFESCI    COPYRIGHT 2004 CSA on STN
ACCESSION NUMBER:   2004:73896  LIFESCI
TITLE:              A proteomic approach to identify phosphoproteins encoded by
                    cDNA libraries
AUTHOR:             Shi, X.; Belton, R.J.,Jr.; Burkin, H.R.; Vieira, A.P.;
                    Miller, D.J.
CORPORATE SOURCE:   Department of Animal Sciences, University of Illinois, 1207
                    West Gregory Drive, Urbana, IL 61801, USA; E-mail:
                    djmille@uiuc.edu
SOURCE:             Analytical Biochemistry [Anal. Biochem.], (20040600) vol.
                    329, no. 2, pp. 289-292.
                    ISSN: 0003-2697.
DOCUMENT TYPE:      Journal
FILE SEGMENT:       N
LANGUAGE:           English
SUMMARY LANGUAGE:   English
AB   We report a method for large-scale rapid analysis of phosphoproteins in
     tissues or cells by combining immobilized
     metal affinity chromatography (IMAC) with phage display cDNA
     library screening. We expressed a testis cDNA library as fusion proteins
     on phage and, using IMAC, enriched for sequences encoding phosphoproteins.
     Selected clones were polymerase chain reaction amplified and sequenced.
     The majority of the clones sequenced (80%) encoded known proteins
     previously identified as phosphoproteins. Immunoblotting with
     phosphotyrosine antibodies confirmed that some of the selected sequences
     encoded tyrosine phosphorylated proteins when expressed on phage. An
     advantage of this method is the rapid identification of phosphoproteins
     encoded by a cDNA library, which can identify proteins that are
     potentially phosphorylated in vivo. When this method is combined with
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limited enzymatic digestion and tandem mass spectrometric techniques, the specific phosphorylation site in a protein can be identified. This technique can be used in proteomics studies to effectively **detect** phosphorylated proteins and avoid time-consuming and expensive peptide sequencing.

L19 ANSWER 2 OF 10 PASCAL COPYRIGHT 2004 INIST-CNRS. ALL RIGHTS RESERVED. on STN

ACCESSION NUMBER: 2002-0387673 PASCAL
COPYRIGHT NOTICE: Copyright .COPYRGT. 2002 INIST-CNRS. All rights reserved.
TITLE (IN ENGLISH): Immobilization of barley protoplasts on a polyelectrolyte modified electrode for measuring the photoelectric behavior of protoplasts
AUTHOR: YULAN QI; HONGPING ZHANG; MANMING YAN; ZHIYU JIANG
CORPORATE SOURCE: Department of Chemistry, Fudan University, Shanghai 200433, China
SOURCE: Electrochemistry communications, (2002), 4(5), 431-435, 23 refs.
ISSN: 1388-2481
DOCUMENT TYPE: Journal
BIBLIOGRAPHIC LEVEL: Analytic
COUNTRY: Netherlands
LANGUAGE: English
AVAILABILITY: INIST-26863, 354000101042980170
AN 2002-0387673 PASCAL
CP Copyright .COPYRGT. 2002 INIST-CNRS. All rights reserved.
AB A novel method to immobilize barley protoplasts on the poly(diallyl dimethyl ammonium chloride) gold/(PDADMAC) electrode was developed for the purpose to **measure** the photoelectric behavior of barley protoplasts. The electrochemical quartz crystal microbalance (EQCM) results show that the thickness of the adsorbed PDADMAC layer is 2.4 nm. The barley protoplasts are immobilized on the surface of gold/PDADMAC electrode due to the electrostatic adsorption between negatively charged protoplasts and positively charged PDADMAC. The fluorescence image taken by laser scanning confocal microscope shows that the attached barley protoplasts are integrity. For the gold/PDADMAC/barley protoplast electrode an anodic photocurrent was observed under the irradiation of white light (wavelength of 200-800 nm) and its properties are discussed. This novel method may provide a convenient technique for **immobilizing cells** or other bio-particles on the surface of electrode for studying their electrochemical characters.

L19 ANSWER 3 OF 10 BIOTECHNO COPYRIGHT 2004 Elsevier Science B.V. on STN DUPLICATE

ACCESSION NUMBER: 2002:34311443 BIOTECHNO
TITLE: Optical algal biosensor using alkaline phosphatase for determination of heavy **metals**
AUTHOR: Durrieu C.; Tran-Minh C.
CORPORATE SOURCE: C. Tran-Minh, Centre SPIN/Genie Enzymatique, Ecole Nationale Superieure des Mines, 158 Cours Fauriel, 42023 Saint Etienne Cedex 2, France.
E-mail: claude.durrieu@entpe.fr
SOURCE: Ecotoxicology and Environmental Safety, (2002), 51/3 (206-209), 12 reference(s)
CODEN: EESADV ISSN: 0147-6513
DOCUMENT TYPE: Journal; Article
COUNTRY: United Kingdom
LANGUAGE: English
SUMMARY LANGUAGE: English
AN 2002:34311443 BIOTECHNO
AB A biosensor is constructed to **detect** heavy **metals** from inhibition of alkaline phosphatase (AP) present on the external membrane of Chlorella vulgaris microalgae. The microalgal **cells**

are **immobilized** on removable membranes placed in front of the tip of an optical fiber bundle inside a homemade microcell. C. vulgaris was cultivated in the laboratory and its alkaline phosphatase activity is strongly inhibited in the presence of heavy **metals**. This property has been used for the determination of those toxic compounds. .COPYRGT. 2002 Elsevier Science (USA).

L19 ANSWER 4 OF 10 BIOTECHNO COPYRIGHT 2004 Elsevier Science B.V. on STN
ACCESSION NUMBER: 2000:30802064 BIOTECHNO
TITLE: Potential for the use of photosystem II submembrane fractions immobilised in poly(vinylalcohol) to **detect** heavy **metals** in solution or in sewage sludge
AUTHOR: Rouillon R.; Boucher N.; Gingras Y.; Carpentier R.
CORPORATE SOURCE: R. Rouillon, Universite de Perpignan, Centre de Phytopharmacie, UMR CNRS no. 5054, 52 Av de Villeneuve, 66860 Perpignan, France.
E-mail: rouillon@univ-perp.fr
SOURCE: Journal of Chemical Technology and Biotechnology, (2000), 75/11 (1003-1007), 15 reference(s)
CODEN: JCTBDC ISSN: 0268-2575
DOCUMENT TYPE: Journal; Article
COUNTRY: United Kingdom
LANGUAGE: English
SUMMARY LANGUAGE: English
AN 2000:30802064 BIOTECHNO
AB Photosystem II submembrane fractions were immobilised by entrapment in poly(vinylalcohol) bearing styrylpyridinium groups (PVA-SbQ). The properties of the immobilised material, in a single-compartment micro-photoelectrochemical cell using platinum electrodes in potentiostatic mode, were compared with native (free) samples. The optimal operating conditions were investigated (electron acceptor concentration, pH, temperature, time contact and chlorophyll concentration). The photocurrent of the immobilised fractions could be inhibited by pollutants such as heavy **metals** (**mercury**, copper, lead, cadmium, chromium, nickel, and zinc) in solution. The potential for use of this system to evaluate the toxicity of sewage sludges was shown.

L19 ANSWER 5 OF 10 PASCAL COPYRIGHT 2004 INIST-CNRS. ALL RIGHTS RESERVED. on STN
ACCESSION NUMBER: 1999-0521977 PASCAL
COPYRIGHT NOTICE: Copyright .COPYRGT. 1999 INIST-CNRS. All rights reserved.
TITLE (IN ENGLISH): Surface enhanced Raman spectroscopy of bacteria coated by silver
Advances in fluorescence sensing technology IV : San Jose CA, 24-27 January 1999
AUTHOR: EFRIMA S.; BRONK B. V.; CZEGE J.
LAKOWICZ Joseph R. (ed.); SOPER Steven A. (ed.); THOMPSON Richard B. (ed.)
CORPORATE SOURCE: Department of Chemistry, Ben Gurion University, 84105, Israel; US AFRL, ERDEC, Aberdeen Proving Ground, MD 21010-5424, United States; Uniformed Services University of the Health Sciences, Bethesda, MD 20814-4799, United States
International Society for Optical Engineering, Bellingham WA, United States (patr.); International Biomedical Optics Society, United States (patr.)
SOURCE: SPIE proceedings series, (1999), 3602, 164-171, 12 refs.
Conference: 4 Advances in fluorescence sensing technology. Conference, San Jose CA (United States), 24 Jan 1999

ISSN: 1017-2653
ISBN: 0-8194-3072-2
DOCUMENT TYPE: Journal; Conference
BIBLIOGRAPHIC LEVEL: Analytic
COUNTRY: United States
LANGUAGE: English
AVAILABILITY: INIST-21760, 354000084580860190
AN 1999-0521977 PASCAL
CP Copyright .COPYRGT. 1999 INIST-CNRS. All rights reserved.
AB We present a novel method to **measure** Raman spectra from whole bacteria cells by using Surface Enhanced Raman Scattering (SERS). We deposit a silver **coat** on Escherichia **coli** and Bacillus megaterium bacteria and **measure** strongly enhanced (>400,000 fold) and highly reproducible Raman spectra. The spectra are rich but not overly congested, as the surface enhancement is selective to the precise chemical nature of the biochemical molecules, and their proximity to the silver particulate matter. The main bands we observe can be associated with peptides and polysaccharides in the cell-wall and its membrane. The spectra from E. coli (a Gram-negative bacterium) and B. megaterium (a Gram-positive bacterium) are similar in their general form, but differ in detail. The spectrum from a commercial yeast extract is vastly different. This approach can be extended to probe the internal chemical environment within bacteria and applied to the identification of microorganisms also applied to studying other biochemical problems and phenomena, such as biomineralization, heavy **metal** toxicity, cell-wall structure and others.

L19 ANSWER 6 OF 10 PASCAL COPYRIGHT 2004 INIST-CNRS. ALL RIGHTS RESERVED. on STN
ACCESSION NUMBER: 1999-0008643 PASCAL
COPYRIGHT NOTICE: Copyright .COPYRGT. 1999 INIST-CNRS. All rights reserved.
TITLE (IN ENGLISH): Detection of heavy **metal** ions at femtomolar levels using protein-based biosensors
AUTHOR: BONTIDEAN I.; BERGGREN C.; JOHANSSON G.; CSOEREGI E.; MATTIASSON B.; LLOYD J. R.; JAKEMAN K. J.; BROWN N. L.
CORPORATE SOURCE: Department of Biotechnology, Chemical Center, P.O. Box 124, Lund University, 221 00 Lund, Sweden; Department of Analytical Chemistry, Chemical Center, P.O. Box 124, Lund University, 221 00 Lund, Sweden; School of Biological Sciences, The University of Birmingham, Edgbaston, Birmingham B15 2TT, United Kingdom
SOURCE: Analytical chemistry : (Washington, DC), (1998), 70(19), 4162-4169, 35 refs.
ISSN: 0003-2700 CODEN: ANCHAM
DOCUMENT TYPE: Journal
BIBLIOGRAPHIC LEVEL: Analytic
COUNTRY: United States
LANGUAGE: English
AVAILABILITY: INIST-120B, 354000071180870280
AN 1999-0008643 PASCAL
CP Copyright .COPYRGT. 1999 INIST-CNRS. All rights reserved.
AB Sensors based on proteins (GST-SmtA and MerR) with distinct binding sites for heavy **metal** ions were developed and characterized. A capacitive signal transducer was used to **measure** the conformational change following binding. The proteins were overexpressed in Escherichia **coli**, purified, and **immobilized** in different ways to a self-assembled thiol layer on a gold electrode placed as the working electrode in a potentiostatic arrangement in a flow analysis system. The selectivity and the sensitivity of the two protein-based biosensors were measured and compared for copper, cadmium, **mercury**, and zinc ions. The GST-SmtA electrodes displayed a broader selectivity (sensing all four heavy **metal** ions) compared with the MerR-based ones, which showed an accentuated

SUMMARY LANGUAGE: English

AB Blood was analyzed from 151 pelagic marine birds to establish reference ranges for hematological and plasmic biochemical parameters from healthy, wild populations of Pacific seabirds. Of the 13 species examined, 9 were from the Family Alcidae (N = 122 individuals) and the remainder (N = 29) from the Families Phalacrocoracidae, Laridae, and Procellariidae. Three of 8 hematological parameters (total white blood cell count, lymphocyte count and eosinophil count) differed significantly among species, as did 9 of 13 plasma biochemical parameters (alkaline phosphatase, aspartate aminotransferase, creatine kinase, cholesterol, glucose, lactate dehydrogenase, total bilirubin, total protein and field total protein). There were no differences among species for packed **cell** volume, buffy **coat**, **cell** counts of heterophils, monocytes and basophils, or for concentrations of alanine aminotransferase, triglycerides, uric acid and calcium. Plasma calcium concentration, triglyceride levels and field total protein varied significantly between sexes, with females having higher mean concentrations of all 3 parameters. However, no significant relationships between **measures** of breeding condition (brood patch size, subcutaneous and mesenteric fat deposits, or ovarian follicle size and ovary weight) and calcium or alkaline phosphatase concentrations in female birds could be identified. Alanine aminotransferase and uric acid were the only **analytes** which did not differ significantly between species or sexes.

L19 ANSWER 9 OF 10 BIOTECHNO COPYRIGHT 2004 Elsevier Science B.V. on STN

ACCESSION NUMBER: 1994:24188962 BIOTECHNO

TITLE: Detection of a putative 30-kDa ligand of the cluster-2 antigen

AUTHOR: Helfrich W.; Van Geel M.; The T.H.; De Leij L.

CORPORATE SOURCE: Department of Clinical Immunology, University Hospital Groningen, Oostersingel 59,9713 EZ Groningen, Netherlands.

SOURCE: International Journal of Cancer, (1994), 57/SUPPL. 8 (70-75)
CODEN: IJCNAW ISSN: 0020-7136

DOCUMENT TYPE: Journal; Conference Article

COUNTRY: United States

LANGUAGE: English

SUMMARY LANGUAGE: English

AN 1994:24188962 BIOTECHNO

AB The cluster-2 antigen, also called EGP-2, is a 38-kDa transmembrane glycoprotein with a distribution that is largely confined to human epithelial cells and their derived carcinomas. Monoclonal antibodies (MAbs) directed against EGP-2 have been extensively studied as anti-tumor agents, yet the function of the antigen is not known. In the present study we used a biotinylated recombinant soluble derivative of the EGP-2 (sEGP(bio)) as a probe to **detect** a possible EGP-2 ligand, using various carcinoma cell lines as a substrate. The recombinant soluble EGP-2 was expressed in the Autographa californica nuclear polyhedrosis virus (baculovirus) expression system. The sEGP-2, to which we engineered a poly-histidine affinity tag, was purified from infected Spodoptera frugiperda insect **cells** using **immobilized** **metal**- ion-affinity chromatography (IMAC). In Western blot analysis the sEGP(bio) probe bound to a 30-kDa protein band in 2 out of 5 of the assessed carcinoma cell lines, suggesting that this band may be an EGP-2 ligand. Interestingly, binding only occurred when, prior to SDS-PAGE, cell lysates had been subjected to a reducing agent (2-mercapto-ethanol). The physiological significance of this phenomenon and nature of the detected 30-kDa protein band remains to be determined.

L19 ANSWER 10 OF 10 BIOTECHNO COPYRIGHT 2004 Elsevier Science B.V. on STN

ACCESSION NUMBER: 1984:15199683 BIOTECHNO

TITLE: Acute toxicity screening of water pollutants using a bacterial electrode

AUTHOR: Dorward E.J.; Barisas B.G.
CORPORATE SOURCE: Department of Chemistry, Colorado State University, Fort Collins, CO 80523, United States.
SOURCE: Environmental Science and Technology, (1984), 18/12 (967-972)
CODEN: ESTHAG
DOCUMENT TYPE: Journal; Article
COUNTRY: United States
LANGUAGE: English
AN 1984:15199683 BIOTECHNO
AB Escherichia coli electrodes were used in an instrumental bioassay of the acute toxicity of substances in water. The method involves potentiometric measurement of CO.sub.2 production by E. **coli cells immobilized** at the surface of a CO.sub.2-sensing electrode. The net rate of CO.sub.2 production by the bacteria reflects the complex series of biochemical reactions which constitute the respiratory processes of the cells. The inhibition of any part of the respiratory process by some pollutant will result in a measurable decrease in bacterial CO.sub.2 production. The E. coli electrode is able to **measure** the acute toxicity of a broad range of substances, including **metals**, anions, gases, and organic compounds. Dose-effect curves obtained with the E. coli electrode are compared with results reported for the Beckman Microtox bioassay and for rainbow trout 96-h LC.sub.5.sub.0 values. Acute toxicity values measured with the E. coli electrode for cadmium, lead, copper, cyanide, and arsenite are comparable to those obtained with the 15-min Microtox bioassay.